



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/589,607	08/16/2006	Hitoshi Matsubara	47233-5006	2679
55694	7590	11/17/2010	EXAMINER	
DRINKER BIDDLE & REATH (DC)				SCHMIDTMANN, BAHAR
1500 K STREET, N.W.		ART UNIT		PAPER NUMBER
SUITE 1100		1623		
WASHINGTON, DC 20005-1209		NOTIFICATION DATE		DELIVERY MODE
		11/17/2010		ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

DBRIPDocket@dbr.com
penelope.mongelluzzo@dbr.com

Office Action Summary	Application No.	Applicant(s)
	10/589,607	MATSUBARA ET AL.
	Examiner BAHAR SCHMIDTMANN	Art Unit 1623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 23 August 2010.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 20-52 is/are pending in the application.

4a) Of the above claim(s) 20-27 and 34-50 is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 28-33, 51 and 52 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 16 August 2006 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date See Continuation Sheet

4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date: _____

5) Notice of Informal Patent Application

6) Other: _____

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :10/03/2007; 05/06/2008; 07/09/2008; 08/25/2008; 08/23/2010.

DETAILED ACTION

This application is a 35 U.S.C. § 371 National Stage Filing of International Application No. PCT/JP05/02411, filed 17 February 2005, which claims foreign priority under 35 U.S.C. §119(a-d) to JP 2004-40679, filed 17 February 2004. Currently an English language translation of this foreign priority document has not been made of record.

The preliminary amendments filed 23 August 2010 is acknowledged. Claims 20-52 are pending in the current application. Claims 20-27 and 34-50 are withdrawn as being drawn to a non-elected invention. Claims 28-33, 51 and 52 are examined on the merits herein.

Information Disclosure Statement

The Information Disclosure Statements submitted 03 October 2007, 06 May 2008, 09 July 2008, 25 August 2008 and 23 August 2010 is acknowledged and considered.

Election/Restrictions

Applicant's election without traverse of Group II, claims 28-33, 51 and 52 in the reply filed on 23 August 2010 is acknowledged.

Claims 20-27 and 34-50 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable

generic or linking claim. Election was made **without** traverse in the reply filed on 23 August 2010.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 28, 29 and 51 are rejected under 35 U.S.C. 102(b) as anticipated by Suehiro et al. (JP 06-009607, cited by Applicant in Information Disclosure Statement).

Suehiro et al. discloses a method for manufacturing tea catechins comprising extracting water-soluble components from tea leaves followed by adsorption on a synthetic adsorbent packed in a chromatography column (claim 1). Suehiro et al. discloses a washing process for removing water-soluble impurities, by washing the chromatography column with water and hot water sequentially (claim 12). Suehiro et al. discloses the temperature range of the hot water is 60 to 90 °C (claim 14). Suehiro et al. discloses eluting catechin oxidative polymerization products in the washing process (claims 2 and 6). Suehiro et al. discloses the adsorbent is washed with water in a ratio of 4:1 (claim 10). And Suehiro et al. discloses tea can be extracted with hot water at a temperature of 80 °C or higher (p.18-19, paragraph 0052). Suehiro et al. discloses

three main classifications of tea which include green tea, oolong tea and black tea (p.6-7, paragraph 0002).

The eluting solvent is added to the top of the tea extract, therefore the tea extract is passed through the column with the excess of solvent, in a ratio of at least 4:1 extract passed through column to resin. Therefore, Suehiro et al. meets the extract to resin ratio recited in instant claim 29. Because there are only three types of teas expressly disclosed, one having ordinary skill in the art would be able to at once envisage the manufacturing process disclosed above using oolong tea. Therefore, Suehiro et al. meets the species of tea limitations recited in instant claims

According to MPEP 2111.04: However, the court noted (quoting *Minton v. Nat'l Ass'n of Securities Dealers, Inc.*, 336 F.3d 1373, 1381, 67 USPQ2d 1614, 1620 (Fed. Cir. 2003)) that a "whereby clause in a method claim is not given weight when it simply expresses the intended result of a process step positively recited." *Id.*

The steps performed by Suehiro et al. recited results in a separation of polymerized and non-polymerized catechins. The recitation "in which the ratio of the polymerized catechins to the non-polymerized catechins is made higher than in the original liquid" and "whereby the non-polymerized catechins are selectively removed" is the result of performing the positively recited steps and it is not necessary for the prior art to recognize this property of the obtained product.

Thus, Suehiro et al. anticipates claims 28, 29 and 51 of the instant application.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 28-33, 51 and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seto et al. (JP 08-109178, English translation cited by Applicant in Information Disclosure Statement) in view of Yoshibe et al. (JP 04-182479, English translation cited by Applicant in Information Disclosure Statement).

Seto et al. teaches a method of manufacturing low-caffeine tea polyphenol (abstract). Seto et al. teaches the tea extract can come from oolong tea (p.5, paragraph 0008). Seto et al. teaches dissolving 10 grams of green tea extract in 20 mL water and applying it to a glass column packed with 300 mL of a synthetic adsorbent, SP-207 (p.9, example 1). Seto et al. teaches the column was eluted with 1500 mL of a buffer

solution at pH 10 (p.9, example 1). Seto et al. teaches concentrating and drying the fraction (p.9, example 1). Sato et al. teaches the tea extract is a hot-water extract of tea or a product obtained by treating the hot-water extract with a resin or an adsorbent (claim 2 and p.5-6, paragraph 0009). Seto et al. teaches the tea polyphenol can be utilized in beverages such as alcoholic liquors, soft drinks and instant drinks (p.8, paragraph 0013).

The ratio of extract to adsorbent can be estimated by adding 10 grams of green tea extract to 20 g water (estimated to be equivalent to 20 mL water) to 1500 g buffer (estimated to be roughly equivalent to 1500 mL buffer, which gives 1530 grams of tea extract to 300 g synthetic adsorbent (estimated to be roughly equivalent to 300 mL synthetic adsorbent). A mixture of 1530 grams of tea extract to 300 grams of adsorbent provides a ratio of 5.1:1 extract to column capacity.

Seto et al. does not expressly disclose the temperature of the aqueous liquid as 50 °C (instant claims 28 and 30).

Yoshibe et al. teaches hot-water extraction of tea leaves includes mixing the tea leaves with water at a temperature of 80 °C or higher (p.8, first paragraph).

It would have been obvious at the time the invention was made to extract the tea in the Seto et al. reference with hot water wherein the temperature of the hot water is at 80 °C or higher.

MPEP 2141 states, "The key to supporting any rejection under 35 U.S.C. 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious. The Supreme Court in KSR noted that the analysis supporting a rejection

under 35 U.S.C. 103 should be made explicit. The Court quoting *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006), stated that "[R]ejections on obviousness cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." *KSR*, 550 U.S. at ,82 USPQ2d at 1396. Exemplary rationales that may support a conclusion of obviousness include: (A) Combining prior art elements according to known methods to yield predictable results; (B) Simple substitution of one known element for another to obtain predictable results; (C) Use of known technique to improve similar devices (methods, or products) in the same way; (D) Applying a known technique to a known device (method, or product) ready for improvement to yield predictable results; (E) " Obvious to try " choosing from a finite number of identified, predictable solutions, with a reasonable expectation of success; (F) Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces if the variations are predictable to one of ordinary skill in the art; (G) Some teaching, suggestion, or motivation in the prior art that would have led one of ordinary skill to modify the prior art reference or to combine prior art reference teachings to arrive at the claimed invention."

Based on the teachings of the MPEP and *KSR* above, by employing the rationale in (G) Some teaching, suggestion, or motivation in the prior art that would have led one of ordinary skill to modify the prior art reference or to combine prior art reference teachings to arrive at the claimed invention; one having ordinary skill in the art would

have been motivated to extract the tea in the Seto et al. reference with hot water wherein the temperature of the hot water is at 80 °C or higher. From the teaching of Seto et al., one having ordinary skill in the art would have known that the aqueous solution used to extract the tea leaves is hot. Yoshibe et al. similarly teaches hot-water extraction of tea leaves. Specifically, Yoshibe et al. teaches the temperature of the water is at 80 °C or higher. Thus, one having ordinary skill in the art would have known that the tea could have been extracted with hot water, wherein the temperature of the hot water could have been 80 °C or higher.

Additionally, one having ordinary skill in the art would have been motivated to extract oolong tea, since it is one of four teas exemplified by the Seto et al. reference and used the extract in a beverage as suggested. Similarly, one having ordinary skill in the art would have been able to at once envisage performing the above method steps using oolong tea.

The eluting solvent is added to the top of the tea extract, therefore the tea extract is passed through the column with the excess of solvent, in a ratio of at least 5:1:1 extract passed through column to resin. Therefore, Seto et al. meets the extract to resin ratio recited in instant claims 29 and 32. **According to MPEP 2111.04:** However, the court noted (quoting Minton v. Nat'l Ass'n of Securities Dealers, Inc., 336 F.3d 1373, 1381, 67 USPQ2d 1614, 1620 (Fed. Cir. 2003)) that a "whereby clause in a method claim is not given weight when it simply expresses the intended result of a process step positively recited." Id.

The steps performed by Seto et al. recited, results in a separation of polymerized and non-polymerized catechins. The recitation "in which the ratio of the polymerized catechins to the non-polymerized catechins is made higher than in the original liquid" and "whereby the non-polymerized catechins are selectively removed" is the result of performing the positively recited steps and it is not necessary for the prior art to recognize this property of the obtained product.

Thus, the claimed invention as a whole is *prima facie* obvious over the combined teaching of the prior art.

Conclusion

In view of the rejections to the pending claims set forth above, no claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ms. BAHAR SCHMIDTMANN whose telephone number is 571-270-1326. The examiner can normally be reached on Mon-Thurs 9:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Shaojia Anna Jiang can be reached on 571-272-0627. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/BAHAR SCHMIDTMANN/
Patent Examiner
Art Unit 1623

/Shaojia Anna Jiang/
Supervisory Patent Examiner
Art Unit 1623